

REMARKS

Claims 1, 2, 14, and 15 have been amended. No new matter has been added.

I. Claim Rejections under 35 U.S.C. § 103

Claims 1-3, 8-16, and 21-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0005419 (Pieper) in view of U.S. Patent No. 5,812,854 (Steinmetz).

As amended, claims 1 and 14 each recite the following elements:

In element (a) : "...determining a first performance profile for the first optimized form of the software program, and comparing the first performance profile with the performance objectives;"

In element (b): "based on the results of comparing the first performance profile with the performance objectives, if the performance objective are not met by the first optimized form of the software program, then optimizing the first optimized form of the software program such that a resulting second optimized form of the software program includes at least one portion that is dependent on the target processor and is coded in the high-level language"

Applicants respectfully submit that neither Pieper nor Steinmetz disclose or suggest such limitations.

As shown in Fig. 2 of Pieper, this reference discloses a process that takes source code 52, transforms the source code 52 into a compact intermediate form 56 which is then transformed into an expanded intermediate form 60 that is substantially independent of a target processor 12. The expanded intermediate form 60 is translated into instructions 64 that are specific to the architecture of target processor 12.

Nowhere does Pieper disclose that the step of transforming expanded intermediate form 60 into instructions 64 is based upon results of comparing performance profiles with

performance objectives. Further more, nowhere does Pieper disclose that the processor specific form 64 is created only if the performance objective are not met. In fact, the flowchart of Fig. 2 does not show any breakpoints or exit points between the steps to create expanded intermediate form 60 and instruction form code 64. Based upon paragraph 31 and Fig. 2 of Pieper, if the expanded intermediate form 60 is created, then the instruction form 64 must also be created.

Paragraph 32 of Pieper does disclose that process 76 generates an execution profile 78 that is used to determine whether code 74 exhibits optimal performance. However, as noted in Paragraph 31 at page 4, left column, lines 7-9, the observations of process 76 are then used to generate a more efficient version of expanded intermediate form 60, which is substantially independent of the target processor 12.

This approach by Pieper to create a new form which is independent of the target processor is in sharp contrast to the presently claimed invention in which the performance profile is compared to determine whether to create a second optimized form which includes at least one portion that is dependent on the target processor. The Steinmetz reference does not provide any teaching or suggestion to perform the cited limitations, and therefore does not cure this defect of the Pieper reference.

For at least this reason, Applicants respectfully suggest that claims 1 and 14 are patentable over the cited art.

As noted in prior responses to Office Actions, claims 1 and 14 also each recites flagging at least one portion of a code to indicate that the at least one portion is dependent on a target processor. Applicants agree with the Examiner that Pieper does not disclose or suggest flagging a portion of a code (i.e., to indicate that the portion is target processor dependent). However,

Applicants continue to respectfully submit that Steinmetz fails to teach or suggest the deficiency present in Pieper. In the Office Action of July 27, 2005 at page 9, the Office Action maintains that Steinmetz discloses a compiler directive mechanism that teaches “flagging at least one portion of a code to indicate that the at least one portion is dependent on a target processor.”

Applicants continue to disagree that Steinmetz discloses this limitation, and note that Applicants cannot find the source code directive example cited on page 9 of the Office Action within Steinmetz itself. If the rejection is maintained, Applicants respectfully request the Examiner to particularly point out where the source code example is to be found in Steinmetz.

In addition, claims 1 and 14 now recite that the act of “flagging at least one portion of a code to indicate that the at least one portion is dependent on a target processor” is only performed if “the first optimized form of the software program is optimized to create the second optimized form of the software program.” Nowhere does Steinmetz disclose that the compiler directive mechanism is performed only if a first optimized form is optimized to create a second optimized form, as presently claimed.

For at least the foregoing reason, claims 1 and 14, and their respective dependent claims, are believed allowable over Pieper, Steinmetz, and their combination.

Claims 4-7 and 17-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0005419 (Pieper) in view of U.S. Patent No. 5,812,854 (Steinmetz) and further in view of Kum et al. (0-7803-5041-3/99, IEEE). Claims 4-6 and 17-20 are dependent claims from claims 1 and 14. Based upon the foregoing, it is respectfully submitted that Kum et al. does not disclose the noted deficiencies in the Pieper and

Steinmetz references. As such, for at least the same reasons as stated above, claims 4-7 and 17-20 are submitted as being allowable for being dependent upon claims 1 and 14.

CONCLUSION

Based on the foregoing, all claims are believed allowable, and an allowance of the claims is respectfully requested. If the Examiner has any questions or comments, the Examiner is respectfully requested to contact the undersigned at the number listed below.


If the Commissioner determines that additional fees are due or that an excess fee has been paid, the Patent Office is authorized to debit or credit (respectively) Deposit Account No.

50-2518, billing reference no. 7017922001.

Respectfully submitted,
Bingham McCutchen LLP

Dated: November 28, 2005

By: _____


Peter C. Mei
Reg. No. 39,768

Three Embarcadero Center, Suite 1800
San Francisco, CA 94111-4067
Telephone: (650) 849-4870
Telefax: (650) 849-4800